

APPARATUS AND METHODS FOR J-EDIT NUCLEAR MAGNETIC RESONANCE MEASUREMENT

Abstract

A method for obtaining nuclear magnetic resonance measurements includes inducing a static magnetic field in a formation fluid sample; applying an oscillating magnetic field to the fluid sample according to a preparation pulse sequence that comprises a J-edit pulse sequence for developing J modulation; and acquiring the nuclear magnetic resonance measurements using a detection sequence, wherein the detection sequence comprises at least one 180-degree pulse. The method may further include acquiring the nuclear magnetic resonance measurements a plurality of times each with a different value in a variable delay in the J-edit pulse sequence; and analyzing amplitudes of the plurality of nuclear magnetic resonance measurements as a function of the variable delay to provide J coupling information.

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